BD|SENSORS
pressure measurement

BAROLI 05

Battery Powered Digital Pressure Gauge

Ceramic Sensor

class 0.2

Nominal pressure

from 0 ... 400 mbar up to 0 ... 600 bar

Special characteristics

- rotatable housing
- 2-line LC display
  4.5-digit 7-segment display
  6-digit 14-segment additional display
- different mechanical connections:
  inch, NPT threads

Functions

- min / max function with reset function
- offset and end point calibration
- setting the pressure unit
  (bar, mbar, psi, InHg, cmHg, mmHg, hPa, kPa, MPa, mH_2O, InH_2O)
- switch-off automatic configuration

The battery-powered digital pressure gauge BAROLI 05 has been designed for measuring the pressure (absolute or gauge) of fluids, oils and gases.

The display housing is rotatable, thus ensuring an easy reading even under unfavourable mounting conditions. Additional functions as changing unit, displaying min / max values, calibrating the offset and of span, as well as configuring the automatic switching-off complete the profile.

Preferred areas of use are

- Plant and machine engineering
  Pneumatics / hydraulics
- Laboratory techniques
- Environmental engineering
  (water - sewage - recycling)

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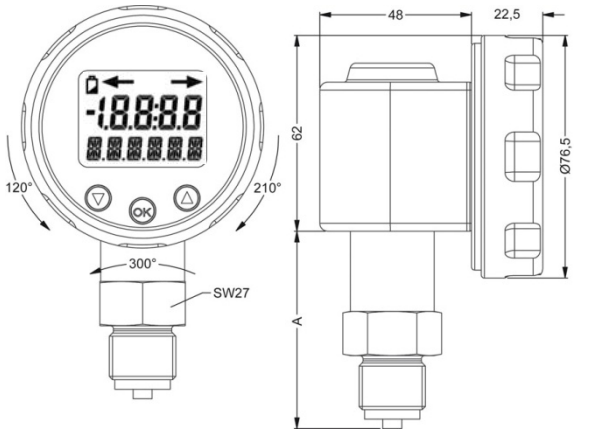
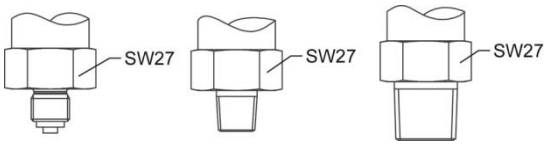
Input pressure range																		
Nominal pressure gauge	[bar]	0.4	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	600
Nominal pressure abs.	[bar]	-	0.6	1	1.6	2.5	4	6	10	16	25	40	60	100	160	250	400	600
Overpressure	[bar]	1	2	2	4	4	10	10	20	40	40	100	100	200	400	400	600	800
Burst pressure	[bar]	2	4	4	5	5	12	12	25	50	50	120	120	250	500	500	650	880
Vacuum pressure		-1 … 0 bar, overpressure: 4 bar, burst pressure: 7 bar																
Vacuum resistance		$P_N \geq 1$ bar: unlimited vacuum resistance $P_N < 1$ bar: on request																

Performance		
Accuracy [1]	≤ ± 0.25 % FSO BFSL	
Measuring rate	5/sec	
[1] accuracy according to IEC 60770 – minimum value setting (non-linearity, hysteresis, repeatability)		
Thermal effects (Offset and Span)		
Thermal effects	≤ ± 0.2 % FSO / 10 K	in compensated range -25 ... 85 °C
Permissible temperatures		
Permissible temperatures	medium: -20 ... 85 °C	environment: -20 ... 70 °C storage: -30 ... 80 °C
Mechanical stability		
Vibration	5 g RMS (25 ... 2000 Hz)	according to DIN EN 60068-2-6
Shock	100 g / 1 msec	according to DIN EN 60068-2-27
Materials		
Pressure port / housing	stainless steel 1.4404 (316L)	
Display housing	PA 6.6, Polycarbonate	
Seals (media wetted)	FKM	
Diaphragm	ceramics Al_2O_3 96 %	
Media wetted parts	pressure port, seals, diaphragm	
Miscellaneous		
Display	LC-Display, visible range 40 x 30 mm; 4.5-digit 7-segment main display, digit height 11 mm, range of indication ±19999; 6-digit 14-segment additional display, digit height 7.5 mm	
Electromagnetic compatibility	emission and immunity according to EN 61326	
Supply	3.6 V lithium battery; 2 pieces (1/2 AA)	
Data storage	EEPROM (non-volatile)	
Ingress protection	IP 65	
Installation position	any	
Weight	approx. 300 g	
AD-converter solution	14 Bit	
Operational life of battery	standby mode: approx. 5 years	
Mechanical operational life	100 million load cycles	
CE-conformity	EMC directive: 2014/30/EU	pressure equipment directive: 2014/68/EU (module A) [2]
[2] This directive is only valid for devices with maximum permissible overpressure > 200 bar.		

Dimensions (in mm)



G1/2" EN 837



G1/4" EN 837 1/4" NPT 1/2" NPT

dimensioning value A:	
pressure port	mm:
G1/2" EN 837	62.5
G1/4" EN 837	54.5
1/4" NPT	54.5
1/2" NPT	60.5

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Ordering code BAROLI 05

BAROLI 05 ☐☐☐ - ☐☐☐☐ - 0 - ☐☐ - 0K0 - ☐☐☐ - ☐ - ☐ - ☐ - ☐ - ☐☐☐

Pressure		
gauge	M 0 0	
absolute	M 0 1	
Input [bar]		
0,4	4 0 0 0	
0,6	6 0 0 0	
1.0	1 0 0 1	
1.6	1 6 0 1	
2.5	2 5 0 1	
4.0	4 0 0 1	
6.0	6 0 0 1	
10	1 0 0 2	
16	1 6 0 2	
25	2 5 0 2	
40	4 0 0 2	
60	6 0 0 2	
100	1 0 0 3	
160	1 6 0 3	
250	2 5 0 3	
400	4 0 0 3	
600	6 0 0 3	
-1 … 0	X 1 0 2	
customer	9 9 9 9	consult
Accuracy [BFSL]		
0.25 %	B 5	
customer	9 9	consult
Mechanical connection		
G1/2" EN 837	2 0 0	
G1/4" EN 837	4 0 0	
1/2" NPT	N 0 0	
1/4" NPT	N 4 0	
customer	9 9 9	consult
Seals		
FKM	1	
customer	9	consult
Pressure port		
stainless steel 1.4404 (316L)	1	
customer	9	consult
Diaphragm		
ceramics Al_2O_3 96%	2	
customer	9	consult
Front foil		
standard	1	
neutral	N	
customer	9	consult
Special version		
standard	0 0 0	
customer	9 9 9	consult

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